

WHAT IS CLAIMED IS:

1. A method for compiling a color correction table,  
the method comprising:  
    receiving color values of a color space stored in the  
    color correction table;  
    smoothing the color values to provide first color  
    values corresponding to achromatic color in said color  
    space;  
    in the event that said first color values does not  
    correspond to achromatic color due to said smoothing,  
    adjusting the first color values to provide second color  
    values corresponding to the achromatic color in said color  
    space; and  
    storing the second values in the color correction table.
2. The method of claim 1, wherein said adjusting is  
performed so that said second value is converted to a value  
on the achromatic axis.
3. The method of claim 1, wherein said adjusting is  
performed so that said second value is projected onto the  
achromatic axis in said color space.
4. The method of claim 1, further comprising defining

selected conditions for performing said smoothing.

5. The method of claim 4, wherein said smoothing conditions comprise limit values as to the amount of change between the color values before and after smoothing.

6. The method of claim 4, wherein said smoothing conditions are each set for achromatic color and other colors.

7. The method of claim 6, wherein said smoothing conditions for achromatic color are formed based upon limit values as to the amount of change in color at a plurality of positions on the achromatic axis.

8. The method of claim 1 further comprising providing a control program and a computer for executing said method for compiling a color correction table.

9. The method of claim 8 further comprising providing a storage medium for storing said control program.

10. A device for compiling a color correction table having color values in a color space, the device comprising:  
a smoothing unit for performing smoothing for values in

achromatic color in said color space; and

a correction unit for adjusting said first values into second values corresponding to achromatic color, in the event that said first values do not corresponds to achromatic color due to said smoothing.

11. The device of claim 10 further comprising a display screen for displaying value differences before and after smoothing is performed on the first values.

12. A software product for adjusting a color correction table, the software product comprising:

program code for smoothing color values stored in the color correction table to provide first achromatic color values: and

program code for modifying the first achromatic color values such that second achromatic color values are generated for storage in the color correction table.

13. The software product of claim 12, further comprising program code for modifying said second achromatic values into values on an achromatic axis.

14. The software product of claim 12, further comprising program code for modifying said second achromatic

values for projection onto an achromatic axis.

15. The software product of claim 12, further comprising program code for defining selected conditions for performing said smoothing.

16. The software product of claim 15, wherein said smoothing conditions comprise limit values as to the amount of change between the color values before and after smoothing.

17. The software product of claim 15, wherein said smoothing conditions are each set for achromatic color and other colors.

18. The software product of claim 15, wherein said smoothing conditions for achromatic color are formed based upon limit values as to the amount of change in color at a plurality of positions on the achromatic axis.

19. The software product of claim 15 further comprising program code for controlling said software product on a computer.